

CURRENT INDUSTRIAL REPORTS

**Manufacturers' Shipments,
Inventories, and Orders****October 1972**

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

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SUMMARY

New orders for manufactured products in October decreased \$135 million or 0.2 percent to \$65.64 billion from \$65.78 billion in September, after seasonal adjustment. Shipments in October increased \$870 million or 1.4 percent to \$64.77 billion. Unfilled orders increased \$870 million or 1.1 percent to \$83.05 billion at the end of October. Manufacturers' inventories increased \$560 million or 0.5 percent to \$106.00 billion at the end of October. The inventories to shipments ratio decreased from 1.65 to 1.64.

For the 3 months ending in October, the average month-to-month change in new orders was a 1.8 percent increase compared with a 0.3 percent increase for the 3 months ending in July and a 1.0 percent increase for the 3 months ending in April.

NEW ORDERS

New orders for durable goods increased \$195 million or 0.5 percent to \$37.04 billion. Increases in new orders for motor vehicles and parts (\$560 million), electrical machinery (\$135 million), and nonelectrical machinery (\$137 million) were partially offset by decreases in fabricated metal products (\$170 million), primary metals (\$112 million), and other durable goods (\$410 million). The capital goods industries supplementary series decreased \$220 million as a decrease in the defense portion (\$545 million) was partially offset by an increase in the non-defense portion (\$325 million).

SHIPMENTS

Shipments of durable goods increased \$1.18 billion or 3.4 percent to \$36.22 billion in October. Shipments of nondurable goods decreased \$315 million or 1.1 percent to \$28.55 billion in October.

UNFILLED ORDERS

Unfilled orders for durable goods increased \$825 million or 1.0 percent to \$79.33 billion at the end of October.

INVENTORIES

Inventories of durable goods and nondurable goods manufacturers increased \$450 million and \$115 million respectively in October. At the all manufacturing level, materials and supplies increased \$195 million, work in process increased \$405 million and finished goods decreased \$40 million.

SCHEDULED RELEASE DATES

The figures on the durable goods industries in this report supersede those issued earlier in the advance report on durable goods. The advance report is based on a tabulation of early reports and is limited to statistics on shipments, new orders, and unfilled orders for a few broad industry categories. The present report is based on more complete reporting, but the estimates are also considered preliminary. Final figures will appear as historical data in the report to be published for next month. The advance report on durable goods for November is scheduled for release on December 21, 1972 and the full report is scheduled for release on January 3, 1973.

For an explanation of terms used in this report see appendix following table 5.

Inquiries concerning these figures should be addressed to the U.S. Department of Commerce, Social and Economic Statistics Administration, Bureau of the Census, Industry Division, Washington, D.C. 20233.

Table 1.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, BY INDUSTRY GROUP

(Millions of dollars)

Industry group	Shipments						Total inventories					
	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment ¹		
	Oct. 1972 ^b	Sept. 1972 ^c	Aug. 1972	Oct. 1972 ^b	Sept. 1972 ^c	Oct. 1971 ^c	Oct. 1972 ^b	Sept. 1972 ^c	Aug. 1972	Oct. 1972 ^b	Sept. 1972 ^c	Oct. 1971 ^c
All manufacturing industries:												
Total.....	64,773	63,903	63,352	67,082	67,074	58,031	106,003	105,441	105,138	105,302	104,470	101,062
Total, excluding transportation.....	55,858	55,757	55,193	57,676	58,376	50,549	89,640	89,115	88,661	88,799	88,062	86,040
Durable goods industries, total.	36,222	35,037	34,710	37,323	36,778	30,983	69,283	68,834	68,542	68,790	68,359	65,544
Stone, clay, and glass products.	2,134	2,078	2,125	2,285	2,252	1,827	2,378	2,367	2,337	2,252	2,276	2,182
Primary metals, total.....	5,777	5,638	5,393	5,584	5,546	4,149	9,656	9,761	9,759	9,657	9,667	9,265
Blast furnaces, steel mills.	2,931	2,788	2,564	2,690	2,643	1,736	5,326	5,411	5,385	5,373	5,363	5,002
Nonferrous metals.....	2,106	2,122	2,092	2,119	2,160	1,774	3,444	3,479	3,504	3,417	3,448	3,435
All other primary metals....	740	728	737	775	743	639	886	871	870	867	856	828
Fabricated metal products total.....	3,547	3,526	3,460	3,665	3,713	3,317	7,649	7,425	7,340	7,501	7,379	7,431
Metal cans, barrels, and drums.....	439	419	454	426	475	377	674	672	711	642	663	705
Machinery, except electrical, total.....	5,759	5,759	5,666	5,697	5,904	5,043	13,759	13,700	13,534	13,623	13,513	13,501
Engines and turbines.....	420	449	431	370	482	359	1,324	1,309	1,280	1,336	1,283	1,192
Farm machinery and equipment.	634	611	543	685	625	546	1,172	1,196	1,176	1,114	1,154	964
Construction, mining, and material handling equipment.	938	894	936	900	928	766	2,600	2,531	2,490	2,537	2,483	2,575
Metalworking machinery.....	387	411	411	391	438	367	1,179	1,178	1,161	1,186	1,171	1,173
General industrial machinery	468	456	472	476	471	399	1,189	1,168	1,166	1,166	1,151	1,163
Electrical machinery, total...	4,830	4,767	4,751	5,107	5,132	4,413	10,287	10,237	10,154	10,209	10,169	9,733
Electrical transmission and distribution equipment and industrial apparatus.....	930	897	877	939	948	845	2,233	2,213	2,183	2,221	2,197	2,081
Household appliances.....	638	651	682	663	693	584	1,068	1,047	1,052	1,031	1,017	1,081
Radio and TV.....	433	427	459	528	554	379	929	932	921	924	928	763
Communication equipment.....	1,148	1,208	1,157	1,177	1,219	1,151	3,007	2,983	2,965	3,001	2,980	2,863
Transportation equipment, total	8,915	8,146	8,159	9,406	8,698	7,482	16,363	16,326	16,477	16,503	16,408	15,022
Motor vehicles and parts....	5,703	5,279	5,336	6,257	5,855	5,087	4,297	4,319	4,523	4,361	4,423	4,001
Aircraft, missiles, and parts.....	2,208	2,059	1,978	2,170	1,984	1,632	9,274	9,253	9,203	9,323	9,255	8,819
Shipbuilding and railroad equipment.....	658	486	533	631	506	541	2,112	2,081	2,063	2,173	2,086	1,658
Instruments and related products, total.....	1,066	1,067	1,042	1,109	1,161	1,039	2,624	2,571	2,551	2,596	2,556	2,394
Scientific and engineering..	549	534	530	560	568	515	1,517	1,508	1,499	1,503	1,494	1,403
All other instruments and related products.....	517	533	512	549	593	524	1,107	1,063	1,052	1,093	1,062	991
All other durable goods industries.....	4,194	4,056	4,114	4,470	4,372	3,713	6,567	6,447	6,390	6,449	6,391	6,016
Nondurable goods industries, total.....	28,551	28,866	28,642	29,759	30,296	27,048	36,720	36,607	36,596	36,512	36,111	35,518
Food and kindred products, total.....	9,323	9,605	9,485	9,745	10,187	8,854	9,362	9,306	9,429	9,660	9,244	9,476
Meat products.....	2,025	2,144	2,165	2,169	2,191	2,082	897	887	906	887	829	825
Fats and oils.....	574	586	550	570	584	492	698	651	746	686	588	731
Tobacco products.....	528	511	517	522	533	493	2,345	2,314	2,272	2,333	2,226	2,130
Textile mill products.....	2,194	2,422	2,372	2,425	2,571	2,358	3,847	3,786	3,810	3,706	3,716	3,532
Paper and allied products, total.....	2,432	2,383	2,407	2,502	2,467	2,196	2,779	2,797	2,758	2,743	2,749	2,737
Pulp, paper, etc.....	1,006	964	976	1,025	974	892	1,013	1,036	1,031	1,011	1,017	1,067
Paperboard containers.....	683	700	692	729	732	662	840	842	826	833	839	815
All other paper containers..	743	719	739	748	761	642	926	919	901	899	893	855
Chemicals and allied products, total.....	4,938	4,846	4,852	4,995	5,079	4,427	6,804	6,751	6,728	6,656	6,626	6,524
Industrial chemicals, except pigments.....	1,477	1,499	1,456	1,463	1,509	1,337	1,896	1,890	1,888	1,875	1,869	1,874
Drugs, soap, and toiletries.	1,542	1,485	1,480	1,655	1,667	1,456	2,164	2,155	2,127	2,106	2,116	2,021
Petroleum and coal products... Rubber and plastics products, n.e.c.....	2,369	2,437	2,397	2,374	2,463	2,193	2,254	2,272	2,254	2,290	2,284	2,354
All other nondurable goods industries.....	1,531	1,594	1,547	1,593	1,614	1,445	2,256	2,256	2,276	2,226	2,218	2,088
See footnotes at end of table.	5,236	5,068	5,065	5,603	5,382	5,082	7,073	7,125	7,069	6,898	7,048	6,677

Table 1.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, BY INDUSTRY GROUP--Continued

(Millions of dollars)

Industry group	New orders						Unfilled orders					
	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment ¹		
	Oct. 1972 ^p	Sept. 1972 ^t	Aug. 1972	Oct. 1972 ^p	Sept. 1972 ^t	Oct. 1971	Oct. 1972 ^p	Sept. 1972 ^t	Aug. 1972	Oct. 1972 ^p	Sept. 1972 ^t	Oct. 1971
All manufacturing industries:												
Total.....	65,642	65,776	64,409	68,032	68,778	58,317	83,048	82,180	80,299	82,366	81,518	71,903
Total, excluding transportation.....	56,423	57,018	56,107	58,323	59,609	50,738	58,109	57,541	56,274	57,412	56,864	50,868
Durable goods industries, total.	37,045	36,851	35,727	38,185	38,447	31,176	79,329	78,506	76,686	78,661	77,901	68,908
Primary metals, total.....	5,747	5,859	5,967	5,646	5,677	4,292	8,330	8,361	8,138	7,600	7,537	5,466
Blast furnaces, steel mills.	2,946	2,936	3,004	2,773	2,777	1,859	5,310	5,295	5,146	4,678	4,596	2,921
Nonferrous metals.....	2,001	2,175	2,174	2,044	2,138	1,798	1,961	2,066	2,013	1,883	1,957	1,712
Fabricated metal products.....	3,520	3,691	3,556	3,626	3,941	3,158	10,078	10,104	9,939	10,094	10,133	9,568
Machinery, except electrical, total.....	6,143	6,006	5,853	6,111	6,110	5,210	14,570	14,184	13,936	14,526	14,113	12,397
Engines and turbines.....	484	547	485	458	577	423	3,959	3,895	3,797	3,967	3,878	3,448
Construction, mining, and material handling equipment.	995	894	969	959	928	791	2,637	2,580	2,580	2,629	2,570	2,310
Metalworking machinery.....	445	449	429	451	479	357	1,225	1,167	1,129	1,241	1,181	993
General industrial machinery.	566	549	469	540	541	404	1,441	1,343	1,250	1,400	1,336	1,164
Electrical machinery, total...	5,160	5,025	4,778	5,229	5,569	4,461	14,901	14,571	14,310	14,984	14,861	14,547
Electrical transmission and distribution equipment and industrial apparatus.....	988	1,066	853	983	1,072	884	4,224	4,166	3,995	4,191	4,146	3,870
Household appliances.....	639	673	684	661	705	584	152	151	129	148	150	137
Radio and TV.....	465	498	487	525	643	381	705	673	602	731	734	487
Communication equipment.....	1,281	1,125	1,018	1,227	1,361	1,186	5,768	5,636	5,718	5,898	5,848	6,341
Transportation equipment, total.....	9,219	8,758	8,302	9,709	9,169	7,579	24,939	24,639	24,025	24,954	24,654	21,035
Aircraft, missiles, and parts.....	2,327	2,275	2,235	2,262	2,062	1,740	16,602	16,484	16,267	16,556	16,465	14,001
Shipbuilding and railroad equipment.....	670	848	387	714	836	502	5,543	5,531	5,168	5,666	5,584	4,894
All other durable goods industries.....	7,256	7,512	7,271	7,864	7,981	6,476	6,511	6,647	6,338	6,503	6,603	5,895
Nondurable goods industries, total.....	28,597	28,925	28,682	29,847	30,331	27,141	3,719	3,674	3,613	3,705	3,617	2,995
Industries with unfilled orders.....	7,745	7,784	7,765	8,246	8,094	7,374	3,719	3,674	3,613	3,705	3,617	2,995
Industries without unfilled orders.....	20,852	21,141	20,917	21,601	22,237	19,767	-	-	-	-	-	-

- Represents zero. ^p Preliminary. ^r Revised.¹ Adjusted for trading-day and calendar-month variations.

Table 2.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, FOR MARKET CATEGORIES AND SUPPLEMENTARY SERIES
(Millions of dollars)

Industry group	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment		
	Oct. 1972 ^p	Sept. 1972 ^t	Aug. 1972	Oct. 1972 ^p	Sept. 1972 ^t	Oct. 1971 ^r	Oct. 1972 ^p	Sept. 1972 ^t	Aug. 1972	Oct. 1972 ^p	Sept. 1972 ^t	Oct. 1971 ^r
	Shipments						Total inventories					
All manufacturing industries, total..	64,773	63,903	63,352	67,082	67,074	58,031	106,003	105,441	105,138	105,302	104,470	101,062
Durable goods industries, total.....	36,222	35,037	34,710	37,323	36,778	30,983	69,283	68,834	68,542	68,790	68,359	65,544
Nondurable goods industries, total.....	28,551	28,866	28,642	29,759	30,296	27,048	36,720	36,607	36,596	36,512	36,111	35,518
Industry groups arranged by market categories:												
Home goods and apparel.....	6,331	6,419	6,358	6,975	7,085	6,174	11,612	11,524	11,465	11,244	11,325	10,480
Consumer staples.....	12,091	12,233	12,205	12,707	13,040	11,588	14,327	14,315	14,262	14,542	14,181	14,059
Equipment and defense products, except automotive.....	9,326	9,032	8,968	9,294	9,210	8,085	27,444	27,282	27,026	27,354	27,059	26,059
Automotive equipment.....	6,478	6,060	6,117	7,076	6,687	5,749	5,738	5,753	5,974	5,747	5,805	5,227
Construction materials, supplies, and intermediate products.....	5,677	5,612	5,632	5,958	6,007	5,154	8,697	8,433	8,287	8,458	8,282	8,132
Other materials and supplies and intermediate products.....	24,870	24,547	24,072	25,072	25,045	21,281	38,185	38,134	38,124	37,957	37,818	37,105
Supplementary series: ²												
Household durable goods industries.....	2,880	3,000	3,034	3,292	3,362	2,666	5,382	5,319	5,294	5,240	5,248	4,870
Capital goods industries.....	10,994	10,632	10,564	10,944	10,883	9,421	30,801	30,642	30,396	30,788	30,463	29,505
Nondefense.....	9,121	8,815	8,872	9,112	9,064	7,769	25,039	24,906	24,661	24,922	24,687	24,447
Defense*.....	1,873	1,817	1,692	1,832	1,819	1,652	5,762	5,736	5,735	5,866	5,776	5,058
	New orders						Unfilled orders					
All manufacturing industries, total..	65,642	65,776	64,409	68,032	68,778	58,317	83,048	82,180	80,299	82,366	81,518	71,903
Durable goods industries, total.....	37,045	36,851	35,727	38,185	38,447	31,176	79,329	78,506	76,686	78,661	77,901	68,908
Nondurable goods industries, total.....	28,597	28,925	28,682	29,847	30,331	27,141	3,719	3,674	3,613	3,705	3,617	2,995
Industry groups arranged by market categories:												
Home goods and apparel.....	6,403	6,523	6,350	6,943	7,169	6,136	2,672	2,604	2,510	2,690	2,713	2,216
Consumer staples.....	12,087	12,225	12,204	12,717	13,040	11,609						
Equipment and defense products, except automotive.....	9,751	10,050	8,856	9,900	10,189	8,339	42,322	41,728	40,671	42,505	41,873	38,004
Automotive equipment.....	6,651	6,094	6,149	7,204	6,750	5,777						
Construction materials, supplies, and intermediate products.....	5,631	5,790	5,666	5,866	6,232	4,986	9,733	9,778	9,601	9,724	9,815	9,322
Other materials and supplies and intermediate products.....	25,119	25,094	25,184	25,402	25,398	21,470	28,321	28,070	27,517	27,447	27,117	22,361
Supplementary series: ²												
Household durable goods industries.....	3,053	3,113	3,019	3,264	3,457	2,619	2,234	2,161	2,049	2,255	2,284	1,841
Capital goods industries.....	11,541	11,762	10,717	11,610	11,857	9,739	48,612	48,065	46,929	48,796	48,132	43,163
Nondefense.....	9,845	9,519	9,211	9,746	9,735	7,776	28,518	27,792	27,084	28,398	27,764	25,251
Defense*.....	1,696	2,243	1,506	1,864	2,222	1,963	20,094	20,273	19,845	20,398	20,368	17,912

*During 1968 manufacturers in ordnance, communications, aircraft and aircraft parts, and shipbuilding industries began to provide aggregate figures on shipments, orders, and total inventories of work performed for the Department of Defense. The results of these reports are included in the defense series. ^pPreliminary. ^rRevised. ¹Shipments and new orders adjusted for trading day and calendar-month variations; unfilled orders and inventories as of end of month. ²The supplementary series are regroupings of the separate industry categories as follows:

Household durable goods industries - Household furniture; kitchen articles and pottery; cutlery, handtools, and hardware; household appliances; ophthalmic goods, watches, and clocks; and miscellaneous personal goods.

Capital goods industries - The capital goods industries series is comparable to the previous Producers' Capital Goods and the Defense Products (old series) categories.

Nondefense products - Machinery, except electrical (excluding farm machinery and equipment and machine shops), electrical machinery (excluding household appliances and electronic components), and the nondefense portions of shipbuilding and repairing and railroad equipment, communication equipment, aircraft and aircraft parts, and ordnance.

Defense products - Based on separate reports on defense work filed by large defense contractors in the following industries: ordnance, communications, aircraft and aircraft parts, and shipbuilding. The data are comparable to those published annually in the MA-175, Shipments of Defense-Oriented Industries, for the specified industries.

Table 3.--MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS MONTH-TO-MONTH AND LONG TERM PERCENT CHANGES

(Based on seasonally adjusted data)

Item and industry group	Month-to-month			Average monthly rates of change				Average, 1966-1971	
	Sept.- Oct. 1972	Aug.- Sept. 1972	July- Aug. 1972	3 months			12 months Oct. 1971- Oct. 1972	Average rise	Average decline
				July 1972- Oct. 1972	Apr. 1972- July 1972	Jan.-Apr. 1972			
Shipments:									
All manufacturing industries.....	+1.4	+0.9	+2.8	+1.7	+0.2	+1.1	+1.2	+1.3	-1.2
Durable goods industries, total.....	+3.4	+0.9	+2.6	+2.3	+0.3	+1.6	+1.6	+2.1	-1.8
Nondurable goods industries, total.....	-1.1	+0.8	+3.0	+0.9	+0.2	+0.5	+0.8	+0.8	-0.5
Total inventories:									
All manufacturing industries.....	+0.5	+0.3	+1.2	+0.7	+0.5	+0.2	+0.4	+0.5	-0.2
New orders:									
All manufacturing industries.....	-0.2	+2.1	+3.4	+1.8	+0.3	+1.0	+1.3	+1.9	-1.2
Durable goods industries, total.....	+0.5	+3.1	+3.8	+2.5	+0.5	+1.5	+1.7	+2.9	-2.6
Nondurable goods industries, total.....	-1.1	+0.8	+3.0	+0.9	+0.2	+0.4	+0.8	+0.9	-0.5
Unfilled orders:									
Durable goods industries, total.....	+1.0	+2.4	+1.3	+1.6	+1.7	+0.7	+1.1	+0.8	-1.1

Table 4.--VALUE OF MANUFACTURERS' INVENTORIES, BY STAGE OF FABRICATION, BY INDUSTRY GROUP
(Millions of dollars)

Industry group	Seasonally adjusted			Without seasonal adjustment			Seasonally adjusted			Without seasonal adjustment		
	Oct. 1972 ^p	Sept. 1972 ^r	Aug. 1972	Oct. 1972 ^p	Sept. 1972 ^r	Oct. 1971 ^r	Oct. 1972 ^p	Sept. 1972 ^r	Aug. 1972	Oct. 1972 ^p	Sept. 1972 ^r	Oct. 1971 ^r
	Total						Materials and supplies					
All manufacturing industries, total.....	106,003	105,441	105,138	105,302	104,470	101,062	33,373	33,179	33,190	33,437	33,138	32,691
Durable goods industries, total.....	69,283	68,834	68,542	68,790	68,359	65,544	19,621	19,468	19,519	19,754	19,713	19,355
Stone, clay, and glass products.....	2,378	2,367	2,337	2,252	2,276	2,182	792	791	787	787	792	754
Primary metals.....	9,656	9,761	9,759	9,657	9,667	9,265	3,432	3,457	3,468	3,575	3,578	3,544
Machinery (electrical and nonelectrical)	24,046	23,937	23,688	23,832	23,682	23,234	6,393	6,346	6,262	6,355	6,315	6,164
Transportation equipment.....	16,363	16,326	16,477	16,503	16,408	15,022	2,802	2,822	2,969	2,850	2,899	3,058
All other durable goods industries.....	16,840	16,443	16,281	16,546	16,326	15,841	6,202	6,052	6,033	6,187	6,129	5,835
Nondurable goods industries, total.....	36,720	36,607	36,596	36,512	36,111	35,518	13,752	13,711	13,671	13,683	13,425	13,336
Chemicals and allied products.....	6,804	6,751	6,728	6,656	6,626	6,524	2,313	2,331	2,306	2,292	2,306	2,289
Petroleum and coal products.....	2,254	2,272	2,254	2,290	2,284	2,354	519	539	518	516	529	524
Rubber and plastics products, n.e.c.....	2,256	2,256	2,276	2,326	2,218	2,088	643	641	645	644	650	630
All other nondurable goods industries...	25,406	25,328	25,338	25,340	24,983	24,552	10,277	10,200	10,202	10,231	9,940	9,893
	Work in process						Finished goods					
All manufacturing industries, total.....	37,487	37,081	36,645	37,428	36,997	34,796	35,143	35,181	35,303	34,437	34,335	33,575
Durable goods industries, total.....	31,865	31,529	31,153	31,839	31,458	29,518	17,797	17,837	19,870	17,197	17,188	16,671
Stone, clay, and glass products.....	300	304	303	277	289	275	1,286	1,272	1,247	1,188	1,195	1,153
Primary metals.....	3,350	3,394	3,400	3,308	3,320	3,116	2,874	2,910	2,891	2,774	2,769	2,605
Machinery (electrical and nonelectrical)	10,697	10,635	10,521	10,680	10,594	10,376	6,956	6,956	6,905	6,797	6,773	6,694
Transportation equipment.....	12,105	11,998	11,832	12,207	12,060	10,571	1,456	1,506	1,676	1,446	1,449	1,393
All other durable goods industries.....	5,413	5,198	5,097	5,367	5,195	5,180	5,225	5,193	5,151	4,992	5,002	4,826
Nondurable goods industries, total.....	5,622	5,552	5,492	5,589	5,539	5,278	17,346	17,344	17,433	17,240	17,147	16,904
Chemicals and allied products.....	1,039	1,027	1,026	1,032	1,021	988	3,452	3,393	3,396	3,332	3,299	3,247
Petroleum and coal products.....	504	499	511	507	500	498	1,231	1,234	1,225	1,267	1,255	1,332
Rubber and plastics products, n.e.c.....	362	344	348	364	349	318	1,251	1,271	1,283	1,218	1,219	1,140
All other nondurable goods industries...	3,717	3,682	3,607	3,686	3,669	3,474	11,412	11,446	11,529	11,423	11,374	11,185

^p Preliminary.^r Revised.

Table 5.--RATIO OF MANUFACTURERS' INVENTORIES TO SHIPMENTS AND UNFILLED ORDERS TO SHIPMENTS, BY INDUSTRY GROUP

(Based on seasonally adjusted data)

Industry group	Inventories - shipments ratio				Unfilled orders - shipments ratio ¹ (months' backlog)			
	Oct. 1972 ^p	Sept. 1972 ^r	Aug. 1972	Oct. 1971 ^r	Oct. 1972 ^p	Sept. 1972 ^r	Aug. 1972	Oct. 1971 ^r
All manufacturing industries, total.....	1.64	1.65	1.66	1.82	2.12	2.14	2.12	2.18
Durable goods industries, total.....	1.91	1.96	1.97	2.20	2.52	2.57	2.54	2.65
Stone, clay, and glass products.....	1.11	1.14	1.10	1.35	(NA)	(NA)	(NA)	(NA)
Primary metals.....	1.67	1.73	1.81	2.17	1.44	1.48	1.51	1.40
Fabricated metals.....	2.16	2.11	2.12	2.36	3.24	3.25	3.31	3.39
Machinery, except electrical.....	2.39	2.38	2.39	2.67	2.53	2.46	2.46	2.44
Electrical machinery.....	2.13	2.15	2.14	2.34	3.09	3.06	3.01	3.45
Transportation equipment.....	1.84	2.00	2.02	2.11	5.13	5.68	5.52	5.57
Instruments and related products.....	2.46	2.41	2.45	2.42	(NA)	(NA)	(NA)	(NA)
Nondurable goods industries, total.....	1.29	1.27	1.28	1.38	0.48	0.48	0.47	0.43
Food and kindred products.....	1.00	0.97	0.99	1.08	(X)	(X)	(X)	(X)
Tobacco products.....	4.44	4.53	4.39	4.29	(X)	(X)	(X)	(X)
Textile mill products.....	1.75	1.56	1.61	1.72	(NA)	(NA)	(NA)	(NA)
Paper and allied products.....	1.14	1.17	1.15	1.30	(NA)	(NA)	(NA)	(NA)
Chemicals and allied products.....	1.38	1.39	1.39	1.53	(X)	(X)	(X)	(X)
Petroleum and coal products.....	0.95	0.93	0.94	1.06	(X)	(X)	(X)	(X)
Rubber and plastics products, n.e.c.....	1.47	1.42	1.47	1.52	(X)	(X)	(X)	(X)

(NA) Not available. ^pPreliminary. ^rRevised. (X) Not applicable.¹Excludes the following industries with no unfilled order: Wooden containers; glass containers; metal cans, barrels and drums; motor vehicle assembly operations; foods and related products; tobacco; apparel and related products; chemicals; petroleum and coal products; and rubber and plastics products, n.e.c.

Appendix

The following is a description of the survey and definitions used. These are provided to clarify the meaning of the items involved and do not represent any revisions from those definitions previously employed.

DESCRIPTION OF THE SURVEY

The Manufacturers' Shipments, Inventories, and Orders survey provides monthly figures that are comparable to the annual totals published each year in the annual survey of manufactures (ASM). The ASM is based on a sample of approximately 60,000 manufacturing establishments drawn from the 5-year census universe of about 310,000 establishments. In the ASM, each manufacturing establishment provides data on employment, payrolls, shipments, cost of materials, capital expenditures, and inventories as well as other selected items. The establishments do not provide information on unfilled orders or new orders. Since the ASM is establishment based, it provides data for each of the 425 manufacturing industries in the Standard Industrial Classification System (SIC) and area data for industry groups.

The monthly survey M3-1 does not provide information at the complete SIC industry detail because of the smaller size of the reporting panel and the fact that most companies cannot provide shipments, inventories, and orders data monthly for individual establishments.

The monthly reporting panel consists of approximately 5,000 reporting units and includes virtually all companies with 1,000 or more employees and a sample of the smaller ones. The reporting unit typically comprises the entire operations of a company although many of the larger diversified companies file separate divisional type reports for their operations in different industries.

Most of the reporting units include mixed industry activity even within the broad industry categories of the monthly survey. The survey methodology assumes that the month-to-month changes of the reporting units classified in each industry category represent effectively the month-to-month movements of the establishments in the SIC industries which make up the category. Thus, the monthly reports are used to update the ASM estimates by using a link relative of matched companies in each industry.

EXPLANATION OF TERMS

Value of Shipments--Shipments in the monthly survey are equivalent to value of shipments as reported in the ASM which are received or receivable net selling values, f.o.b. plant, after discounts and allowances and excluding freight charges and excise taxes. Included in shipments are the value of all products sold, transferred to other plants of the same company, or shipped on consignment.

Shipments also include receipts of establishments in the industry for contract work performed for others, resales, receipts for miscellaneous activities such as the sale of scrap and refuse; value of installation and repair work performed by employees of the plant; and value of research and development performed at the plant. In the aircraft industry and shipbuilding, the value of work done in a given year varies considerably from the value of shipments because of the long lead time between the input of the materials and labor and the shipments of the completed aircraft or ship. In the annual survey, therefore, the value of work done during the year is requested rather than the value of shipments.

The value of shipments figures developed from the ASM contain duplication at the all manufacturing and industry group levels since the products of some industries are used as materials by other industries within the industry group. With the exception of motor vehicles, it is not significant at the 4-digit SIC group level. Since the M3-1 industry categories typically are groupings of industries, this duplication is significant for the all manufacturing, durable goods and nondurable goods categories and the various market groups. The significance of the duplication within the specific M3-1 industry groups varies depending on the 4-digit industry composition of these groups. It is most pronounced in a few highly integrated industry areas such as primary metals and motor vehicles and parts.

Since most monthly reports are for the entire company or major divisions rather than establishments, the companies are requested to report net sales, i.e., total company billings after discounts and allowances. Companies which file divisional reports are requested to treat transfers from one division of the company to another as if they were net sales to outside customers. Although this

definition of shipments in the monthly reports differs from that used in the annual establishment reports, it is assumed that the month-to-month changes in company sales in the industry are representative of the month-to-month shipments of the establishments in the industry.

Inventories--End-of-month inventories in the monthly survey are identical in definition to the end-of-year inventories in the ASM. In the ASM, respondents are asked to report inventories of individual establishments at approximate current cost if feasible; otherwise, "at book values." Since different methods of inventory valuation are used (LIFO, FIFO, etc.), the definition of the aggregate inventories for establishments in an industry is not precise. The figures on the change in inventories from one period to the next are of greater significance than the actual aggregates.

Inventories are reported by stage of fabrication: (a) finished goods; (b) work in process; and (c) materials, supplies, fuel, and other inventories. In using inventories by stage of fabrication at the all manufacturing and 2-digit industry levels as well as for the durable and non-durable goods sectors, it should be noted that a finished product of one industry may be a raw material for another industry at the next stage of fabrication. Insofar as the durable and nondurable goods sectors and also the 2-digit industry groups contain industries with successive stages of processing, the same type of commodity may be included under different inventory categories in the aggregate statistics.

New Orders Received and Unfilled Orders--

Orders as reported in the monthly survey are net of cancellations during the month. They include orders received during the period and also filled during the period as well as those orders received for future delivery. They also include the net sales value of contract change documents which increase or decrease the sales value of the unfilled orders to which they relate. Orders include only those supported by binding legal documents such as signed contracts, or letter contracts. In case of letter contracts the full amount of the sales value is included if the parties are in substantial agreement on the amount; otherwise, only the funds specifically authorized to be expended are included. The respondent is instructed to deduct the sales value of partial or complete cancellation of existing orders.

Unfilled orders include orders as defined above that have not yet passed through the sales account. Generally, unfilled orders at the end of the reporting period are equal to unfilled orders at the beginning of the period plus net new orders received less net sales.

While both new orders and unfilled orders are used in reviewing individual company reports for consistency, only unfilled orders are estimated directly in the tabulated totals. New orders are derived from the shipments plus net change in unfilled orders for each industry category. This procedure is followed for seasonally adjusted data as well as for the unadjusted data. Shipments and unfilled orders are seasonally adjusted independently. Seasonally adjusted new orders are derived from seasonally adjusted shipments and seasonally adjusted unfilled orders.